

ABSTRACT

According to one exemplary embodiment, a circuit comprises a bipolar transistor having a base, an emitter, and a collector. For example, the bipolar transistor can be an NPN SiGe HBT. The base of the bipolar transistor is an input of the circuit. The emitter
5 of the bipolar transistor is coupled to a first reference voltage. According to this exemplary embodiment, the circuit further comprises a field effect transistor having a gate, a source, and a drain. For example, the field effect transistor may be an NFET. The collector of the bipolar transistor is coupled to the source of the field effect transistor. The gate of the field effect transistor is coupled to a bias voltage. The drain of the field effect transistor is coupled to a second reference voltage. The drain of the field effect transistor is an output of the circuit.